Attitudes and perceptions of UK medical students towards artificial intelligence and radiology: a multicentre survey

Abstract

Objectives To explore the attitudes of United Kingdom (UK) medical students regarding artificial intelligence (AI), their understanding, and career intention towards radiology. We also examine the state of education relating to AI amongst this cohort. Methods UK medical students were invited to complete an anonymous electronic survey consisting of Likert and dichotomous questions. Results Four hundred eighty-four responses were received from 19 UK medical schools. Eighty-eight percent of students believed that AI will play an important role in healthcare, and 49% reported they were less likely to consider a career in radiology due to AI. Eighty-nine percent of students believed that teaching in AI would be beneficial for their careers, and 78% agreed that students should receive training in AI as part of their medical degree. Only 45 students received any teaching on AI; none of the students received such teaching as part of their compulsory curriculum. Statistically, students that did receive teaching in AI were more likely to consider radiology (p = 0.01) and rated more positively to the questions relating to the perceived competence in the post-graduation use of AI (p = 0.01–0.04); despite this, a large proportion of students in the taught group reported a lack of confidence and understanding required for the critical use of healthcare AI tools. Conclusions UK medical students understand the importance of AI and are keen to engage. Medical school training on AI should be expanded and improved. Realistic use cases and limitations of AI must be presented to students so they will not feel discouraged from pursuing radiology.